

## OPINION 641

## ADDITION OF CERTAIN GENERIC AND SPECIFIC NAMES IN THE FAMILY PHASMATIDAE\* (INSECTA, PHASMATODEA) TO THE OFFICIAL LISTS AND INDEXES

**RULING.**—(1) The following generic names are hereby placed on the Official List of Generic Names in Zoology with the Name Numbers specified :

- (a) *Podacanthus* Gray, 1833 (gender : masculine), type-species, by monotypy, *Podacanthus typhon* Gray, 1833 (Name No. 1490) ;
- (b) *Didymuria* Kirby, 1904 (gender : feminine), type-species, by original designation, *Phasma violescens* Leach, 1814 (Name No. 1491) ;
- (c) *Ctenomorpha* Gray, 1833 (gender : feminine), type-species, by designation by Kirby, 1904, *Ctenomorpha marginipennis* Gray, 1833 (Name No. 1492) ;
- (d) *Acrophylla* Gray, 1835 (gender : feminine), type-species, by designation by Karny, 1923, *Phasma titan* Macleay, 1826 (Name No. 1493) ;
- (e) *Ctenomorphodes* Karny, 1923 (gender : masculine), type-species, by original designation, *Phasma (Diura) briareus* Gray, 1834 (Name No. 1494) ;
- (f) *Phasma* Lichtenstein, 1796 (gender : neuter), type-species, by designation by Kirby, 1904, *Phasma empusa* Lichtenstein, 1796 (Name No. 1495).

(2) The following specific names are hereby placed on the Official List of Specific Names in Zoology with the Name Numbers specified :

- (a) *typhon* Gray, 1833, as published in the binomen *Podacanthus typhon*, and as defined by the lectotype designated by Key, 1960 (type-species of *Podacanthus* Gray, 1833) (Name No. 1831) ;
- (b) *wilkinsoni* Macleay (W. J.), 1881, as published in the binomen *Podacanthus wilkinsoni*, and as defined by the lectotype designated by Key, 1960 (Name No. 1832) ;
- (c) *violescens* Leach, 1814, as published in the binomen *Phasma violescens* (type-species of *Didymuria* Kirby, 1904) (Name No. 1833) ;
- (d) *chronus* Gray, 1833, as published in the binomen *Diura chronus*, and as defined by the lectotype designated by Key, 1960 (Name No. 1834) ;
- (e) *titan* Macleay (W. S.), 1826, as published in the binomen *Phasma titan* (type-species of *Acrophylla* Gray, 1835) (Name No. 1835) ;
- (f) *briareus* Gray, 1834, as published in the binomen *Phasma (Diura) briareus* (type-species of *Ctenomorphodes* Karny, 1923) (Name No. 1836) ;
- (g) *tessulata* Gray, 1835, as published in the binomen *Ctenomorpha tessulata* (Name No. 1837) ;
- (h) *empusa* Lichtenstein, 1796, as published in the binomen *Phasma empusa* (type-species of *Phasma* Lichtenstein, 1796) (Name No. 1838).

(3) The following generic names are hereby placed on the Official Index of Rejected and Invalid Generic Names in Zoology with the Name Numbers specified :

- (a) *Podacanthus* Macleay, 1881 (an incorrect spelling for *Podacanthus* Gray, 1833) (Name No. 1569);
- (b) *Diura* Gray, 1833 (a junior homonym of *Diura* Billberg, 1820) (Name No. 1570).
- (4) The following specific names are hereby placed on the Official Index of Rejected and Invalid Specific Names in Zoology with the Name Numbers specified:

(a) *violascens*, Gray, 1833, as published in the binomen *Diura violascens* (and later usages in combination with *Acrophylla* Gray, *Cyphocrania* Burmeister, *Didymuria* Kirby, etc.) (an incorrect spelling for *Phasma violascens* Leach, 1814) (Name No. 705);

(b) *tessellata* Westwood, 1859, as published in the binomen *Acrophylla tessellata* (and later uses in combination with *Acrophylla* Gray and *Ctenomorpha* Gray) (an incorrect spelling for *Ctenomorpha tessulata* Gray, 1835) (Name No. 706).

(5) The family-group name PODACANTHINAE Günther, 1953 (type-genus *Podacanthus* Gray, 1833) is hereby placed on the Official List of Family-Group Names in Zoology with the Name No. 329.

(6) The following family-group names are hereby placed on the Official Index of Rejected and Invalid Family-Group Names in Zoology with the Name Numbers specified:

(a) DIURAE Redtenbacher, 1908 (type-genus *Diura* Gray, 1833) (invalid because the name of its type-genus is a junior homonym) (Name No. 359);

(b) ACROPHYLLINI Redtenbacher, 1908 (type-genus *Acrophylla* Gray, 1835) (Ruled to be invalid because its type-genus was misidentified) (Name No. 360).

#### HISTORY OF THE CASE (Z.N.(S.) 1167)

The present case was first submitted by Dr. K. H. L. Key in September 1956. After some revision the manuscript was sent to the printer on 27 February 1959 and was published on 8 April 1960 in *Bull. zool. Nomencl.* 17 : 235-240. Dr. Key's proposals were supported by Dr. H. F. Lower, Dr. L. P. Clark and Dr. D. R. Ragge (*Bull. zool. Nomencl.* 18 : 78) and by Dr. P. Hadlington (Forestry Commission of N.S.W., Sydney, Australia). An objection to the form of the family-group name PHASMATIDAE, proposed for the Official List, was received from Prof. Ernst Mayr. A full account of the correspondence relating to this matter is given in the following Report to the Commission which was distributed with Voting Paper (61)32:—

"On 9.v.60 the Secretary of the Commission received a letter from Commissioner Ernst Mayr, containing the following comment on one of Dr. Key's proposals:

'I notice that in application Z.N.(S) 1167 Dr. Key proposes to replace the grammatically incorrect generic name Phasmidae by the correct spelling Phasmatidae. I wonder whether in this case it would not be better if the Commission would sanction a grammatically incorrectly formed family name. A search through the zoological literature made by me shows that the name

Phasmidae is almost universally used. Dr. Key mentions that the alternate spelling is also used but I have not been able to find it in any zoological text consulted by me. I seem to recall that the Commission has sanctioned similarly incorrect family names once or twice in the past for the sake of stability. It would seem to me that it is desirable if the Latin Phasmidae would correspond to the English Phasmids. This is a word that is of interest to far more zoologists than to merely a small group of specialists.'

"On being informed of Prof. Mayr's objection Dr. Key wrote to the Secretary on 21.vii.60 as follows:

'Professor Mayr states that he is unable to find the spelling "Phasmatidae" in any zoological text that he has consulted.

'It is true that "Phasmidae" is the form used in the great majority of both general zoological and entomological reference works, and that it preponderates even in the usage of specialists in the group. Among more than a dozen reference works that I have consulted since learning of this development, I have found "Phasmatidae" used in only two, namely Tillyard's "Insects of Australia and New Zealand" (1926) and Brues, Mellander and Carpenter's "Classification of Insects" (1954). Both of these are, of course, very well known entomological texts.

'In the specialist literature, "Phasmidae" is used in the only modern reclassification of the order, namely that of Günther ("Über die taxonomische Gliederung und die geographische Verbreitung der Insektenordnung der Phasmatodea", *Beitr. Ent.* 3 : 541-63 (1953)), in spite of his adoption of "Phasmatodea" for the order. On the other hand, "Phasmatidae" is used by Rehn (e.g. *Trans. Amer. ent. Soc.* 79 : 1-11 (1953); *Proc. Acad. nat. Sci. Philad.* 99 : 1-19 (1947)), who, interestingly, keeps to the form "phasmid" for the vernacular term. More recently, it has been used by Key (*Aust. J. Zool.* 5 : 247-84 (1957)) in a paper dealing with some of the Australian species discussed in my application, and by other Australian authors in a few later contributions on the biology and ecology of these species. As pointed out in my application, it was used as early as 1881 by Macleay.

'The important thing in this case is to get a definite decision, and I do not want to press for "Phasmatidae" if it appears that the usage of "Phasmidae" has been not only preponderant in the general literature, but also so extensive that it would be confusing to endorse the spelling that is correct under the Code. However, I think it only fair to point out that what is now regarded as the order Phasmatodea (or Phasmida, or Phasmatoptera) is not one on which a great deal of literature exists. It contains very few species of economic importance, although it has long attracted attention because of the size and extraordinary procryptic adaptations of most of its members. A large part of the literature on the order has been devoted to the single species *Carausius* (or *Dixippus*) *morosus* Brunn. and Redt., which is a popular laboratory animal. The name of the family or order is mentioned in comparatively few of these papers, the insects being generally referred to as "stick-insects" or "walking sticks". Actually, the inevitable changes consequent upon the elevation of the original family Phasmatidae (or Phasmidae) to ordinal rank, with several different versions of the ordinal name and with restriction of the family to a

part only of its original coverage, are potentially far more confusing than the difference in spelling of the family name.

'The questions that the Commission has to decide are (1) whether standardisation on "Phasmatidae" will lead to misunderstanding or confusion among zoologists accustomed to the spelling "Phasmidae"; (2) whether this confusion will be significant in quantitative terms; and (3) whether it calls for suspension of the provisions of the Code, which should not be undertaken too light-heartedly.'

"On 20.ix.60 the Secretary received the following further comment from Prof. Mayr:

'The more I think about the alternative (*Phasmidae* vs. *Phasmatidae*) the stronger I feel that this is far too important a matter to be treated as an aside in an application which basically deals with a different matter. I have looked at some family names of birds and found that if we apply the changed old Article 4 retroactively, we may have to change several well-known bird names, or rather, well-known names of bird families. This is a case which, in my opinion, is clearly in conflict with the Preamble. Dr. Key wrote me in a recent letter that the general zoologists would surely protest against *Phasmatidae*, if they found the name objectionable. This I very much doubt because from the way Dr. Key's application was advertised, they will never know that this is involved. I wonder how many additional family names of insects will have to be changed once this rule is consistently applied. I would like to have your advice in what manner this troublesome problem can best be placed before the Commission. Perhaps one method would be to separate the *Phasmidae* problem from the rest of Dr. Key's application, and treat it as a separate application to be advertised separately. Another more far-reaching way would be to propose a Declaration to be voted on by the Commission stating that Article 29a not be applied retroactively if the stem adopted by the original author is not that "found by deleting the case ending of the appropriate genitive singular". Frankly I do not know whether this is advisable. Presumably it would be better not to touch the substance of the code, and deal with the exceptional cases by Plenary decisions. Still I feel that the Commission should deal with these cases because it would seem a pity to change well-established names for pedantic grammatical reasons. As it is, the code is quite inconsistent, since it ignores grammatical errors in the various rulings on emendations. Why should it be so particular with grammatical errors made a long time ago in the formation of the names of well-known families?'

"Since Prof. Mayr's proposed conservation of PHASMIDAE as the correct spelling for the family-group name will need the use of the plenary powers, it is suggested that Members of the Commission should indicate on Voting Paper (61)32 whether or not they wish this particular item to be withdrawn and submitted to a fresh vote under the plenary powers or not. If a majority of Commissioners includes proposal (6)(b) on page 240 in an affirmative vote then PHASMATIDAE will be placed on the Official List. If, on the other hand, a majority of Commissioners excludes this particular item then the case for the family-group name will be resubmitted after the publication of plenary powers notices concerning the possible validation of PHASMIDAE".



## DECISION OF THE COMMISSION

On 2 October 1961 the Members of the Commission were invited to vote under the Three-Month Rule on Voting Paper (61)32 either for or against the proposals set out in *Bull. zool. Nomencl.* 17 : 238-240, including or excepting proposals (6)(b) and (7)(c). At the close of the prescribed Voting Period on 2 January 1962 the state of the voting was as follows :

Affirmative Votes—twenty-two (22), received in the following order : Evans, Holthuis, Hemming, Munroe, Vokes, Mayr, Hering, Obruchev, Riley, Lemche, Brinck, Bradley, Alvarado, do Amaral, \*Key, Jaczewski, Tortonese, Mertens, Miller, Kühnelt, Bonnet, Poll.

Negative Votes—none (0).

Voting Papers not returned—three (3) : Boschma, Prantl, Uchida.

Commissioner Stoll returned a late affirmative vote.

The following fifteen (15) Commissioners excluded proposals (6)(b) and (7)(c) from their affirmative votes : Evans, Munroe, Vokes, Mayr, Riley, Lemche, Brinck, Bradley, Alvarado, Tortonese, Mertens, Miller, Kühnelt, Poll, Stoll.

The following six (6) Commissioners voted in favour of proposals (6)(b) and (7)(c) : Holthuis, Hemming, Hering, Obruchev, do Amaral, Jaczewski.

The following comment was made by Commissioner Francis Hemming in returning his vote (9.x.61) : I vote in favour of the correction of PHASMIDAE to PHASMATIDAE not only because this is the correct form of the name but also because I do not believe that the adoption of the corrected form is likely to cause more than a passing inconvenience. Many such corrections have been made in the past and the corrected form has come into general use without causing any serious trouble. In the Lepidoptera, for example, the family-group name based on *Hesperia* Fabricius, 1793, was for many decades almost always written in the incorrect form HESPERIDAE in monographs, textbooks, papers, etc. Its correction to the form HESPERIIDAE by such authors as Watson (1893), Comstock (1895) and Grote (1897) was quickly followed by others and caused no trouble or confusion. It seems to me that the fact that every family-group name is derived from the name of the type-genus removes the objection which might otherwise be felt to the correction of the spelling of such names, for whichever way a family-group name is spelled, there can be no risk of confusion as to the interpretation of the family-group name concerned, it being obvious that it is the name given to the family-group taxon of which the genus, on the name of which it is based, either correctly or incorrectly, is the type-genus.

## ORIGINAL REFERENCES

The following are the original references for names placed on Official Lists and Indexes by the Ruling given in the present Opinion :

*Acrophylla* Gray, 1835, *Syn. Phasm.* : 39

ACROPHYLLINI Redtenbacher, 1908, in Brunner & Redtenbacher, *Insektenfam. Phasm.* : 436

*briareus*, *Phasma* (*Diura*), Gray, 1834, *Trans. ent. Soc. London* 1 : 45

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\* Dr. Key requested that his vote be counted with the majority.

*chronus*, *Diura*, Gray, 1833, *Ent. Aust.* 1 : 20, 26, pl. 5, fig. 2

*Ctenomorpha* Gray, 1833, *Ent. Aust.* 1 : 16, 27

*Ctenomorphodes* Karny, 1923, *Treubia* 3 : 240

*Didymuria* Kirby, 1904, *Syn. Cat. Orthopt.* 1 : 381

*Diura* Gray, 1833, *Ent. Aust.* 1 : 26

DIURAE Redtenbacher, 1908, in Brunner & Redtenbacher, *Insektfam. Phasm.* : 379

*empusa*, *Phasma*, Lichtenstein, 1796, *Cat. Mus. Zool. Hamb.* 3 : 77

*Phasma* Lichtenstein, 1796, *Cat. Mus. Zool. Hamb.* 3 : 77

PODACANTHINAE Günther, 1953, *Beitr. Ent.* 3 : 548, 553

*Podacanthus* Gray, 1833, *Ent. Aust.* 1 : 17

*Podocanthus* Macleay (W. J.), 1881, *Proc. linn. Soc. N.S.W.* 6 : 538

*tessellata*, *Acrophylla*, Westwood, 1859, *Cat. Phasm.* : 115

*tessulata*, *Ctenomorpha*, Gray, 1835, *Syn. Phasm.* : 44

*titan*, *Phasma*, Macleay (W. S.), 1826, in King, *Surv. Coasts Aust.* 2 : 454

*typhon*, *Podacanthus*, Gray, 1833, *Ent. Aust.* 1 : 17, pl. 2, fig. 1

*violascens*, *Diura*, Gray, 1833, *Ent. Aust.* 1 : 21, 27, pl. 6, fig. 1

*violescens*, *Phasma*, Leach, 1814, *Zool. Miscell.* 1 : 26, pl. 9

*wilkinsoni*, *Podacanthus*, Macleay (W. J.), 1881, *Proc. linn. Soc. N.S.W.* 6 : 538

The following are the original references for designations of type-species for genera concerned in the present Ruling :

For *Acrophylla* Gray, 1835 : Karny, 1923, *Treubia* 3 : 240

For *Ctenomorpha* Gray, 1833 : Kirby, 1904, *Syn. Cat. Orthopt.* 1 : 388

For *Phasma* Lichtenstein, 1796 : Kirby, 1904, *Ann. Mag. nat. Hist.* (7)13 : 439

The following are the original references for designations of lectotype for species concerned in the present Ruling :

For *Diura chronus* Gray, 1833 : K. H. L. Key, 1960, *Bull. zool. Nomencl.* 17 : 236

For *Podacanthus typhon* Gray, 1833 : K. H. L. Key, 1960, *Bull. zool. Nomencl.* 17 : 235

For *Podacanthus wilkinsoni* Macleay, 1881 : K. H. L. Key, 1960, *Bull. zool. Nomencl.* 17 : 235

#### CERTIFICATE

WE certify that the votes cast on Voting Paper (61)32 were cast as set out above, that the proposal contained in that Voting Paper has been duly adopted with the exception of paragraphs (6)(b) and (7)(c) which were postponed for further consideration, and that the decision so taken, being the decision of the International Commission, is truly recorded in the present Opinion No. 641.

N. D. RILEY  
Secretary

W. E. CHINA  
Assistant Secretary

*International Commission on Zoological Nomenclature*

*London*

*5 February 1962*